Chapter NR 405
PREVENTION OF SIGNIFICANT DETERIORATION

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NR 405.01 Applicability; purpose. (1) APPLICABILITY. The provisions of this chapter apply to the construction of ~~all~~ new major stationary sources~~ or any project at an existing~~ and all major modifications to major sources located in areas designated as attainment or unclassified. [51.166(a)(7)]

(2) PURPOSE. The purpose of this chapter is to establish, pursuant to s. 285.60, Stats., the requirements and procedures for reviewing and issuing air pollution control permits to all new major stationary sources and all major modifications to major sources located in areas designated as attainment or unclassified.

Note: Throughout the proposed rule, changes have been made which result in the provisions of this PSD rule differing from 40 CFR 51.166, the federal regulation on which it is based. In this rule, the term "air contaminant" is substituted for the term "pollutant" in the federal regulation and "department" for "the State", "the Governor" and "reviewing authority". The federal definition for "building, structure, facility or installation" is applied to the phrase "facility, building, structure, equipment, vehicle or action" — a similar term which appears in Wisconsin's statutory provisions on air pollution. In addition, cross references in the federal regulation have been changed in the rule to comparable provisions in Wisconsin's rule (e.g., "40 CFR Parts 60 and 61" has been changed to "chs. NR 440 and 446 to 449"). Eliminated from the rule are provisions of the federal regulations which do not apply to the state's PSD program (i.e., provisions governing EPA approval of plan revisions).

NR 405.02 Definitions. The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

(1) "Actual emissions" means the actual rate of emissions of a regulated NSR pollutant ~~of an air contaminant~~ from an emissions unit, as determined in accordance with pars. (a) to (c) of this section, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under 405.21 of this section. Instead, paragraphs 405.02(25f) and 405.02(2m) of this section shall apply for those purposes. [51.166(b)(21)(i)]

~~(a) through (d):~~

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the ~~air contaminant~~pollutant during a consecutive 24 month~~-year~~ period which precedes the particular date and which is representative of normal source operation. The department ~~may~~shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating

hours, production rates, and types of materials processed, stored, or combusted during the selected time period. [51.166(b)(21)(ii)]

(b) The department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit. [51.166(b)(21)(iii)] ~~unless reliable data are available which demonstrate that the actual emissions are different than the source-specific allowable emissions.~~

(c) For any emissions unit, ~~other than an electric utility steam generating unit, which~~that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date. [51.166(b)(21)(iv)]

~~(d) For an electric utility steam generating unit, other than a new unit or the replacement of an existing unit, actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the department, on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the department if the department determines such a period to be more representative of normal source post-change operations.~~

(2) "Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source, unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both, and the most stringent of the following:

(a) The applicable standards as set forth in chs. NR 440 and 445 to 449 and under sections 111 and 112 of the act (42 USC 7411 and 7412).

(b) The applicable emissions limitations, as set forth in chs. NR 400 to 499.

(c) The emissions rate specified as a federally enforceable permit condition.

(2m) Baseline actual emissions means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with paragraphs (i) through (iv) of this section.

(i) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The reviewing authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(c) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(d) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraph

(i)(b) of this section.

(ii) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the reviewing authority for a permit required either under this section or under a plan approved by the Administrator, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.

(a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.

(b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(c) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of this chapter, the baseline actual emissions need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of §51.165(a)(3)(ii)(G).

(d) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(e) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraphs (ii)(b) and (c) of this section.

(iii) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

(iv) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in paragraph (i) of this section, for other existing emissions units in accordance with the procedures contained in paragraph(ii) of this section, and for a new emissions unit in accordance with the procedures contained in paragraph (iii) of this section. [51.166(b)(47)]

(3) "Baseline area" means any intrastate area, and every part thereof, designated as attainment or unclassifiable under section 107(d)(1)(D) or (E) of the act (42 USC 7407(d)(1)(D) or (E)) in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than 1 $\mu g/m^3$ (annual average) of the air contaminant for which the

minor source baseline date is established. Area redesignations under section 107(d)(1)(D) or (E) of the act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which either establishes a minor source baseline date or is subject to this chapter.

(4)(a) "Baseline concentration" means that ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each air contaminant for which a minor source baseline date is established and shall include:

1. The actual emissions, as defined in paragraph (1) of this section, representative of sources in existence on the applicable minor source baseline date, except as provided in par. (b).

2. The allowable emissions of major stationary sources which commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

(b) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increases:

1. Actual emissions, as defined in paragraph (1) of this section, from any major stationary source on which construction commenced after the major source baseline date.

2. Actual emissions increases and decreases, as defined in paragraph (1) of this section, at any stationary source occurring after the minor source baseline date. [51.166(b)(13)]

(6) "Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities, other than preparatory activities, which mark the initiation of the change.

(7) "Best available control technology" or "BACT" means an emissions limitation, including a visible emissions standard, based on the maximum degree of reduction for each air contaminant subject to regulation under the act which would be emitted from any proposed major stationary source or major modification which the department, on a case-by-case basis, taking into account energy, environmental, and economic impacts, and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including clean fuels, fuel cleaning or treatment or innovative fuel combination techniques for control of the air contaminant. In no event may application of best available control technology result in emissions of any air contaminant which would exceed the emissions allowed by any applicable standard under chs. NR 440 and 445 to 449 and under sections 111 and 112 of the act (42 USC 7411 and 7412). Emissions from any source utilizing clean fuels or any other means to comply with this subsection may not be allowed to increase above the levels that would have been required under this subsection as it existed prior to enactment of the 1990 clean air act amendments on November 15, 1990. If the department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. The standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(8) "Building, structure, facility or installation" or "facility, building, structure, equipment, vehicle or action" means all of the air contaminant emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties,

and are under the control of the same person (or persons under common control) except the activities of any vessel. Air contaminant emitting activities shall be considered as part of the same industrial grouping if they are classified under the same 2-digit major group as described in the Standard Industrial Classification Manual, 1987, incorporated by reference in s. NR 484.05.

(8m) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam, which was not in widespread use as of November 15, 1990.

(8s) "Clean coal technology demonstration project" means a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of $2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. environmental protection agency. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.

(8u) Clean Unit means any emissions unit that has been issued a major NSR permit that requires compliance with BACT or LAER, is complying with such BACT/LAER requirements, and qualifies as a Clean Unit under this chapter; or any emissions unit that has been designated by a reviewing authority as a Clean Unit, based on the criteria in 405.19(3)(i) through(iv) of this section, using a plan approved permitting process. [51.166(b)(41)]

(9) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and has done one of the following:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time.

(b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(10) "Complete" means, in reference to an application for a permit, that the application contains all the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the department from requesting or accepting any additional information.

(11) "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emission unit) which would result in a change in ~~actual~~ emissions [51.166(b)(8)]

(11c) Continuous emissions monitoring system (CEMS) means all of the equipment that may be required to meet the data acquisition and availability requirements of this chapter, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis. [51.166(b)(43)]

(11e) Continuous emissions rate monitoring system (CERMS) means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time). [51.166(b)(46)]

(11j) Continuous parameter monitoring system (CPMS) means all of the equipment necessary to meet the data acquisition and availability requirements of this chapter, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O_2 or CO_2 concentrations), and to record average operational parameter value(s) on a continuous basis. [51.166(b)(45)]

(11m) "Electric utility steam generating unit" means any steam

electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(12) "Emissions unit" means any part of a stationary source which emits or would have the potential to emit any regulated NSR pollutant and includes an electric steam generating unit as defined in paragraph 405.02(11m). For purposes of this section, there are two types of emissions units as described in paragraphs (a) and (b) of this section.

(a) A new emissions unit is any emissions unit which is (or will be) newly constructed and which has existed for less than 2 years from the date such emissions unit first operated.

(b) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (a) of this section. [51.166(b)(7)]

~~air contaminant subject to regulation under the act.~~

(13) "Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.

(15) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(16) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.

(17) "Indian governing body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(18) "Indian reservation" means any federally recognized reservation established by treaty, agreement, executive order, or act of congress.

(19) "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

(20) "Low terrain" means any area other than high terrain.

(20m) Lowest achievable emission rate (LAER) is as defined in ch. NR 408. [51.166(b)(52)]

(21) Major modification means any physical change in or change in the method of operation of a major stationary source that would result in:

(i) A significant emissions increase of a regulated NSR pollutant (as defined in 405.02(25p)); and

(ii) A significant net emissions increase of that pollutant from the major stationary source. [51.166(b)(2)(i)]

~~"Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any air contaminant subject to regulation under the act.~~

(a) Any significant emissions increase (as defined in 405.02(27) of this section) from any emissions units or net emissions increase (as defined in 405.02(24) of this chapter) at a major stationary source that is significant for volatile organic compounds shall be considered significant for ozone. [51.166(b)(2)(ii)]

~~Any net emissions increase that is significant for volatile organic~~

~~compounds shall be considered significant for ozone.~~

(b) A physical change or change in the method of operation does not include:

1. Routine maintenance, repair, and replacement.

2. Use of an alternative fuel or raw material by reason of any order under sections 2(a) and (b) of the energy supply and environmental coordination act of 1974 (15 USC 791 to 798) or by reason of a natural gas curtailment plan pursuant to the federal power act (16 USC 791a to 828c).

3. Use of an alternative fuel by reason of an order or rule under section 125 of the act (42 USC 7425).

4. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.

5. Use of an alternative fuel or raw material by a stationary source when one of the following applies:

a. The source was capable of accommodating the alternative fuel or raw material before January 6, 1975, unless the change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to this chapter or ch. NR 406, 408 or under an operation permit issued pursuant to ch. NR 407.

b. The source is approved to use the alternative fuel or raw material under any permit issued under this chapter or ch. NR 406, 407 or 408.

6. An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to this chapter, ch. NR 406 or 408 or 40 CFR 52.21 or under an operation permit issued pursuant to ch. NR 407.

7. Any change in ownership at a stationary source.

8. <u>The addition, replacement, or use of a PCP, as defined in 405.02(24m) of this chapter, at an existing emissions unit meeting the requirements of 405.20 of this chapter. A replacement control technology must provide more effective emissions control than that of the replaced control technology to qualify for this exclusion. [51.166(b)(2)(iii)(h)]</u>

~~The addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the department determines that the addition, replacement or use renders the unit less environmentally beneficial, or except when the department determines both of the following:~~

~~a. There is reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any pollutant for which a national ambient air quality standard has been adopted over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of title I of the act (42 USC 7401 to 7515), if any.~~

~~b. The increase will cause or contribute to a violation of any national ambient air quality standard or air quality increment, or visibility limitation.~~

9. The installation, operation, cessation or removal of a temporary clean coal technology demonstration project, provided that the project complies with both of the following:

a. The state implementation plan.

b. Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

10. The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering,

provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

11. The reactivation of a very clean coal-fired electric utility steam generating unit.

12. This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under 405.21 for a PAL for that pollutant. Instead, the definition at 405.21 shall apply. [51.166(b)(2)(iv)]

(21m) "Major source baseline date" means:

(a) In the case of particulate matter and sulfur dioxide, January 6, 1975.

(b) In the case of nitrogen dioxide, February 8, 1988.

(22)(a) "Major stationary source" means:

1. Any of the following stationary sources of air contaminants which emits, or has the potential to emit, 100 tons per year or more of any air contaminant subject to regulation under the act: Fossil fuel fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totalling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants.

2. Notwithstanding the stationary source size specified in subd. 1., any stationary source which emits, or has the potential to emit, 250 tons per year or more of any air contaminant subject to regulation under the act.

3. Any physical change that would occur at a stationary source not otherwise qualifying under this subsection, as a major stationary source if the change would constitute a major stationary source by itself.

(b) A major source that is major for volatile organic compounds shall be considered major for ozone.

(c) Volatile organic compounds exclude the compounds listed under s. NR 400.02(162) unless the compound is subject to an emission limitation under ch. NR 440 or chs. NR 446 to 449.

(d) Mobile source emissions indirectly caused by a source which attracts mobile source activity may not be considered in determining whether the source is a major stationary source for the purposes of this chapter.

(22m)(a) "Minor source baseline date" means the earliest date after the trigger date on which the owner or operator of a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date is:

1. In the case of particulate matter and sulfur dioxide, August 7, 1977.

2. In the case of nitrogen dioxide, February 8, 1988.

(b) The minor source baseline date is established for each air contaminant for which increments or other equivalent measures have been established if:

1. The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(1)(D) or (E) of the act (42 USC 7407(d)(1)(D) or (E)) for the air

contaminant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166.

2. In the case of a major stationary source, the air contaminant would be emitted in significant amounts or, in the case of a major modification, there would be a significant net emissions increase of the air contaminant.

(23) "Necessary preconstruction approvals or permits" means those permits or approvals required under chs. NR 400 to 499.

(24)(a) "Net emissions increase" means, with respect to any regulated NSR pollutant emitted by a major stationary source the amount by which the sum of the following exceeds zero: [51.166(b)(3)(i)]

1. Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph 51.166(a)(7)(iv); and [51.166(b)(3)(i)(a)]

.

2. Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph shall be determined as provided in 405.02(2m), except that paragraphs 405.02(2m)(i)(c) and 405.02(2m)(ii)(d) of this section shall not apply. [51.166(b)(3)(i)(b)]

(b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the following:

1. The date 5 years before construction on the particular change commences.

2. The date that the increase from the particular change occurs.

(c) An increase or decrease in actual emissions is creditable only if :

(a) It occurs within a reasonable period (to be specified by the reviewing authority); and

(b) The reviewing authority has not relied on it in issuing a permit for the source under regulations approved pursuant to this section, which permit is in effect when the increase in actual emissions from the particular change occurs; and

(c) The increase or decrease in emissions did not occur at a Clean Unit, except as provided in paragraphs 405.18(8) and 405.19(10) of this section. [51.166(b)(3)(iii)]

~~the reviewing authority has not relied on it in issuing a permit for the source under this chapter, which permit is in effect when the increase in actual emissions from the particular change occurs.~~

(d) An increase or decrease in actual emissions of sulfur dioxide, nitrogen oxides or particulate matter measured as PM_{10} which occurs before the applicable minor source baseline date is credible only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

(e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(f) A decrease in actual emissions is creditable only to the extent that:

1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions.

2. It is ~~federally~~ enforceable as a practical matter at and after the time that actual construction on the particular change begins.

3. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change and

4. The decrease in actual emissions did not result from the installation of add-on control technology or application of pollution prevention practices that were relied on in designating an emissions unit as a Clean Unit under 405.19. That is, once an emissions unit has been designated as a Clean Unit, the owner or operator cannot later use the emissions reduction from the air pollution control measures that the Clean Unit designation is based on in calculating the net emissions increase for another emissions unit (i.e., must not use that reduction in a "netting analysis" for another emissions unit). However, any new emissions reductions that were not relied upon in a PCP excluded pursuant to 405.20 of this section or for the Clean Unit designation are creditable to the extent they meet the requirements in paragraph 405.20(6)(iv) of this section for the PCP and 405.02(8) or 405.19(10) for a Clean Unit. [51.166(b)(3)(vi)]

(g) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(h) Paragraph (1)(a) of this section shall not apply for determining creditable increases and decreases. [51.166(b)(3)(viii)]

~~(24m) "Pollution control project" means any activity or project undertaken at an existing electric utility steam generating unit for purposes of reducing emissions from the unit. Activities or projects are limited to the following:~~

~~(a) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators.~~

~~(b) An activity or project to accommodate switching to a fuel which is less polluting than the fuel in use prior to the activity or project, including, but not limited to, natural gas or coal re-burning, or the co-firing of natural gas and other fuels for the purpose of controlling emissions.~~

~~(c) A permanent clean coal technology demonstration project conducted under title II, section 101(d) of the further continuing appropriations act of 1985 (42 USC 5903(d)), or subsequent appropriations, up to a total amount of $2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. environmental protection agency.~~

~~(d) A permanent clean coal technology demonstration project that constitutes a repowering project.~~

(24m) Pollution control project (PCP) means any activity, set of work practices or project (including pollution prevention as defined under 405.02(24s)) undertaken at an existing emissions unit that reduces emissions of air pollutants from such unit. Such qualifying activities or projects can include the replacement or upgrade of an existing emissions control technology with a more effective unit. Other changes that may occur at the source are not considered part of the PCP if they are not necessary to reduce emissions through the PCP. Projects listed in 405.02(24m)(i) through (vi) of this section are presumed to be environmentally beneficial pursuant to paragraph 405.20(2)(i) of this section. Projects not listed in these paragraphs may qualify for a case-specific PCP exclusion pursuant to the requirements of paragraphs 405.20(2) and (5).

(i) Conventional or advanced flue gas desulfurization or sorbent injection for control of SO2.

(ii) Electrostatic precipitators, baghouses, high efficiency

multiclones, or scrubbers for control of particulate matter or other pollutants.

(iii) Flue gas recirculation, low-NOX burners or combustors, selective noncatalytic reduction, selective catalytic reduction, low emission combustion (for IC engines), and oxidation/absorption catalyst for control of NOX.

(iv) Regenerative thermal oxidizers, catalytic oxidizers, condensers, thermal incinerators, hydrocarbon combustion flares, biofiltration, absorbers and adsorbers, and floating roofs for storage vessels for control of volatile organic compounds or hazardous air pollutants. For the purpose of this section,''hydrocarbon combustion flare'' means either a flare used to comply with an applicable NSPS or MACT standard (including uses of flares during startup, shutdown, or malfunction permitted under such a standard), or a flare that serves to control emissions of waste streams comprised predominately of hydrocarbons and containing no more than 230 mg/dscm hydrogen sulfide.

(v) Activities or projects undertaken to accommodate switching (or partially switching) to an inherently less polluting fuel, to be limited to the following fuel switches:

(a) Switching from a heavier grade of fuel oil to a lighter fuel oil, or any grade of oil to 0.05 percent sulfur diesel (i.e., from a higher sulfur content #2 fuel or from #6 fuel, to CA 0.05 percent sulfur #2 diesel);

(b) Switching from coal, oil, or any solid fuel to natural gas, propane, or gasified coal;

(c) Switching from coal to wood, excluding construction or demolition waste, chemical or pesticide treated wood, and other forms of ''unclean'' wood;

(d) Switching from coal to #2 fuel oil (0.5 percent maximum sulfur content); and

(e) Switching from high sulfur coal to low sulfur coal (maximum 1.2 percent sulfur content).

(vi) Activities or projects undertaken to accommodate switching from the use of one ozone depleting substance (ODS) to the use of a substance with a lower or zero ozone depletion potential (ODP), including changes to equipment needed to accommodate the activity or project, that meet the requirements of paragraphs (vi)(a) and (b) of this section.

(a) The productive capacity of the equipment is not increased as a result of the activity or project.

(b) The projected usage of the new substance is lower, on an ODP-weighted basis, than the baseline usage of the replaced ODS. To make this determination, follow the procedure in paragraphs (vi)(b)(1) through (4) of this section.

(1) Determine the ODP of the substances by consulting 40 CFR part 82, subpart A, appendices A and B.

(2) Calculate the replaced ODP weighted amount by multiplying the baseline actual usage (using the annualized average of any 24 consecutive months of usage within the past 10 years) by the ODP of the replaced ODS.

(3) Calculate the projected ODP weighted amount by multiplying the projected annual usage of the new substance by its ODP.

(4) If the value calculated in paragraph vi)(b)(2) of this section is more than the value calculated in paragraph (vi)(b)(3) of this section, then the projected use of the new substance is lower, on an ODP weighted basis, than the baseline usage of the replaced ODS. [51.166(b)(31)]

(24s) Pollution prevention means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal. [51.166(b)(38)]

(25) "Potential to emit" means the maximum capacity of a stationary source to emit an air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit an air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(25b) Predictive emissions monitoring system (PEMS) means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O 2 or CO 2 concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis. [51.166(b)(44)]

(25d)Prevention of Significant Deterioration Program (PSD) program means a major source preconstruction permit program that has been approved by the Administrator and incorporated into the plan to implement the requirements of this chapter. Any permit issued under such a program is a major NSR permit. [51.166(b)(42)]

(25e) Project means a physical change in, or change in method of operation of, an existing major stationary source. [51.166(b)(51)]

(25f)(i) Projected actual emissions means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit’s design capacity or its potential to emit that regulated NSR pollutant, and full utilization of the unit would result in a significant emissions increase, or a significant net emissions increase at the major stationary source.

(ii) In determining the projected actual emissions under this section (before beginning actual construction), the owner or operator of the major stationary source:

(a) Shall consider all relevant information, including but not limited to, historical operational data, the company’s own representations, the company’s expected business activity and the company’s highest projections of business activity, the company’s filings with the State or Federal regulatory authorities, and compliance plans under the approved plan; and

(b) Shall include fugitive emissions to the extent quantifiable and emissions associated with startups, shutdowns, and malfunctions; and

(c) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit’s emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under 405.02(2m) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or,

(d) In lieu of using the method set out in 405.02(25f)(a) through (c), may elect to use the emissions unit's potential to emit, in tons per year, as defined under 405.02(25). [51.166(b)(40)]

(25g) "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit meets all of the following criteria:

(a) It has not been in operation for the 2-year period prior to the enactment of the clean air act amendments of 1990 on November 15, 1990, and the emissions from the unit continue to be carried in the department's emissions inventory at the time of enactment.

(b) It was equipped prior to shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%.

(c) It is equipped with low-NO_x burners prior to the time of commencement of operations following reactivation.

(d) It is otherwise in compliance with the requirements of the act.

(25m)(a) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the administrator, in consultation with the federal secretary of energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

(b) Repowering shall also include any unit fired by oil or gas or both which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the federal department of energy.

(c) The department shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under section 409 of the act (42 USC 7651h).

(25p) Regulated NSR pollutant, for purposes of this section, means the following:

(i) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator (e.g., volatile organic compounds are precursors for ozone);

(ii) Any pollutant that is subject to any standard promulgated under section 111 of the Act;

(iii) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or

(iv) Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, which have not been delisted pursuant to section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act. [51.166(b)(49)]

(25s) "Representative actual annual emissions" means the average rate, in tons per year, at which the source is projected to emit a pollutant for the 2-year period after a physical change or change in the method of operation of a unit, or a different consecutive 2-year period within 10 years after that change, where the department determines that such period is more representative of normal source operations, considering the effect any such change will have on increasing or

decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the department shall:

(a) Consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the state or federal regulatory authorities, and compliance plans under title IV of the act.

(b) Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

(25w) Reviewing authority means the State air pollution control agency, local agency, other State agency, Indian tribe, or other agency authorized by the Administrator to carry out a permit program under §51.165 and this section. [51.166(b)(50)]

(26) "Secondary emissions" means emissions which occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purposes of this chapter, secondary emissions must be specific, well defined, quantifiable, and impact the same general areas as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

(27)(a) "Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the air contaminants in Table A, a rate of emissions that would equal or exceed any of the rates in Table A.

Table A
Pollutant and Emissions Rate

1. Carbon monoxide: 100 tons per year (tpy)
2. Nitrogen oxides: 40 tpy
3. Sulfur dioxide: 40 tpy
4. Particulate matter: 25 tpy
5. PM_{10}: 15 tpy
6. Ozone: 40 tpy of volatile organic compounds
7. Lead: 0.60 tpy
8. Mercury: 0.10 tpy
9. Fluorides: 3.0 tpy
10. Sulfuric acid mist: 7.0 tpy
11. Hydrogen sulfide (H_2S): 10 tpy
12. Total reduced sulfur (including H_2S): 10 tpy
13. Reduced sulfur compounds (including H_2S): 10 tpy
14. Municipal waste combustor (MWC) acid gases (measured as total sulfur dioxide and hydrogen chloride): 40 tpy
15. MWC metals (measured as particulate matter): 15 tpy
16. MWC organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.5×10^{-6} tpy
17. CFCs 11, 12, 112, 114, 115: any emission rate
18. Halons 1211, 1301, 2402: any emission rate

(c) "Significant" means any emissions rate in reference to a net emissions increase or the potential of a source to emit an air contaminant subject to regulation under the act other than air contaminants listed in

par. (a) or under section 112(b) of the act (42 USC 7412(b)).

(d) Notwithstanding par. (a), "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 $\mu g/m^3$ (24-hour average).

(27m) Significant emissions increase means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in 405.02(27)(a)) for that pollutant. [51.166(b)(39)]

(28) "Stationary source" means any building, structure, facility or installation which emits or may emit any air contaminant subject to regulation under the act.

(29) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the state implementation plans for the state in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

NR 405.03 Restrictions on area classifications. (1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated by the department:

(a) International parks.

(b) National wilderness areas which exceed 5,000 acres in size.

(c) National memorial parks which exceed 5,000 acres in size.

(d) National parks which exceed 6,000 acres in size.

(2) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this chapter.

(3) The following areas may be redesignated only as Class I or II:

(a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore.

(b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(4) The extent of the areas referred to in subs. (1) and (3) shall conform to any changes in the boundaries which have occurred subsequent to August 7, 1977.

NR 405.04 Exclusions from increment consumption. (1) All of the following concentrations shall be excluded in determining compliance with a maximum allowable increase:

(a) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under sections 2 (a) and (b) of the energy supply and environmental coordination act of 1974 (15 USC 791 to 798) over the emissions from such sources before the effective date of such an order.

(b) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the federal power act (16 USC 791a to 828c) over the emissions from such sources before the effective date of the plan.

(c) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources.

(d) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

(e) Concentrations attributable to the temporary increase in emissions of sulfur dioxide, nitrogen dioxide or particulate matter from stationary sources which are affected by plan revisions approved by the

administrator as meeting the criteria specified in sub. (4).

(2) No sources which have concentrations which are excluded from increment consumption under sub. (1)(a) and (b) may any longer have those concentrations excluded 5 years after the effective date of the order to which sub. (1)(a) refers or the plan to which sub. (1)(b) refers, whichever is applicable. If both such order and plan are applicable, no such exclusion may apply more than 5 years after the later of such effective dates.

(4) For purposes of excluding concentrations pursuant to sub. (1)(e), the administrator may approve a plan revision that:

(a) Specifies the time over which the temporary emissions increase of sulfur dioxide, nitrogen dioxide or particulate matter would occur. Such time is not to exceed 2 years in duration unless a longer time is approved by the administrator.

(b) Specifies that the time period for excluding certain contributions in accordance with par. (a) is not renewable.

(c) Allows no emissions increase from a stationary source which would do either of the following:

1. Impact a Class I area or an area where an applicable increment is known to be violated.

2. Cause or contribute to the violation of a national ambient air quality standard.

(d) Requires limitations to be in effect the end of the time period specified in accordance with par. (a) which would ensure that the emissions levels from stationary sources affected by the plan revision would not exceed those levels occurring from such sources before the plan revision was approved.

NR 405.05 Redesignation. (1) All areas of the state, except as otherwise provided under s. NR 405.03, shall be designated either Class I, Class II, or Class III. Any designation other than Class II shall be subject to the redesignation procedures of this section. Any redesignation must be approved by the administrator as a revision to the applicable state implementation plan.

(2) The department may redesignate areas of the state Class I or Class II if the following criteria are met:

(a) At least one public hearing has been held in the area affected.

(b) Other states, Indian governing bodies, and federal land managers whose lands may be affected by the proposed redesignation are notified at least 30 days prior to the public hearing.

(c) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, is prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion.

(d) Prior to the issuance of notice respecting the redesignation of an area that includes any federal lands, the department shall provide written notice to the appropriate federal land manager and the federal land manager shall be allowed 30 days to confer with the department respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any federal land manager submits written comments and recommendations, the department shall publish a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the federal land manager).

(e) The department proposes the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(3) Any area other than an area to which s. NR 405.03 refers may be redesignated as Class III if the following criteria are met:

(a) The redesignation meets the requirements of provisions

established in accordance with sub. (2).

(b) The redesignation, except any established by an Indian governing body, is specifically approved by the department.

(c) The redesignation does not cause, or contribute to, a concentration of any air contaminant which exceeds any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard.

(d) Any permit application for any major stationary source or major modification subject to provisions established in accordance with s. NR 405.10, which can receive a permit only if the area in question is redesignated as Class III, and any material submitted as part of that application is available, insofar as is practicable, for public inspection prior to any public hearing on redesignation of any area as Class III.

(4) Lands within the exterior boundaries of Indian reservations may be redesignated only by the appropriate Indian governing body. The appropriate Indian governing body may submit to the administrator a proposal to redesignate areas Class I, Class II, or Class III provided that the following conditions are met:

(a) The Indian governing body has followed procedures equivalent to those required of the department under subs. (2) and (3)(c) and (d).

(b) Such redesignation is proposed after consultation with the state in which the Indian reservation is located and which border the Indian reservation.

(5) If the administrator disapproves a proposed redesignation, the classification of the area shall be that which was in effect prior to the disapproval of the redesignation.

(6) If the administrator disapproves any proposed area redesignation, the department or Indian governing body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the administrator.

Note: The time period provided for a federal land manager’s comments in the federal regulations (not in excess of 60 days) is specified as 30 days in sub. (2)(d).

NR 405.06 Stack heights. The degree of emission limitation required for control of any air contaminant under chs. NR 400 to 499 may not be affected in any manner by:

(1) So much of a stack height, not in existence before December 31, 1970, as exceeds good engineering practice, or

(2) Any other dispersion technique not implemented before then.

NR 405.07 Review of major stationary sources and major modifications — source applicability and exemptions. (1) No major stationary source or major modification may begin actual construction unless the requirements of ss NR 405.08 to 405.16 have been met.

(2) The requirements of ss. NR 405.08 to 405.16 shall apply to any major stationary source and any major modification with respect to each air contaminant that it would emit, except as this chapter would otherwise allow.

(3) The requirements of ss. NR 405.08 to 405.11 apply only to any major stationary source or major modification that would be constructed in an area which is designated as attainment or unclassifiable under section 107(a)(1)(D) or (E) of the act (42 USC 7407(a)(1)(D) or (E)).

(4) A major source or major modification is exempt from the requirements of ss. NR 405.08 to 405.16 if any of the following apply:

(a) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and such source does not belong to any of the following categories:

1. Coal cleaning plants (with thermal dryers).
2. Kraft pulp mills.
3. Portland cement plants.
4. Primary zinc smelters.

5. Iron and steel mills.
6. Primary aluminum ore reduction plants.
7. Primary copper smelters.
8. Municipal incinerators capable of charging more than 250 tons of refuse per day.
9. Hydrofluoric, sulfuric, or nitric acid plants.
10. Petroleum refineries.
11. Lime plants.
12. Phosphate rock processing plants.
13. Coke oven batteries.
14. Sulfur recovery plants.
15. Carbon black plants (furnace processes).
16. Primary lead smelters.
17. Fuel conversion plants.
18. Sintering plants.
19. Secondary metal production plants.
20. Chemical process plants.
21. Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input.
22. petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.
23. Taconite ore processing plants.
24. Glass fiber processing plants.
25. Charcoal production plants.
26. Fossil fuel fired steam electric plants of more than 250 million British thermal units per hour heat input.
27. Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the act (42 USC 7411 or 7412).

(b) The major source or major modification is a portable stationary source which has previously received a permit under requirements in ss. NR 405.08 to 405.16 and all of the following conditions are met:

1. The source proposes to relocate and emissions of the source at the new location would be temporary.
2. The emissions from the source would not exceed its allowable emissions.
3. The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated.
4. Reasonable notice is given to the department prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the department not less than 30 days in advance of the proposed relocation unless a different time duration is previously approved by the department.

(5) The requirements of ss. NR 405.08 to 405.16 do not apply to a major stationary source or major modification with respect to a particular air contaminant if the owner or operator demonstrates that, as to that air contaminant, the source or modification is located in an area designated as nonattainment under section 107 of the act (42 USC 7407).

(6) The requirements contained in ss. NR 405.09, 405.11, and 405.13 do not apply to a proposed major stationary source or major modification with respect to a particular air contaminant, if the allowable emissions of that air contaminant from a new source, or the net emissions increase of that air contaminant from a modification, would be temporary and impact no Class I area and no area where an applicable increment is known to be violated.

(7) The requirements contained in ss. NR 405.09, 405.11, and 405.13 as they relate to any maximum allowable increase for a Class II area do not apply to a modification of a major stationary source that was in existence on March l, 1978, if the net increase in allowable emissions of each air contaminant from the modification after the application of best available control technology would be less than 50 tons per year.

(8) The department may exempt a proposed major stationary source or major modification from the requirements of s. NR 405.11 with respect to

monitoring for a particular air contaminant if one of the following applies:

(a) The emissions increase of the air contaminant from a new stationary source or the net emissions increase of the air contaminant from a major modification would cause, in any area, air quality impacts less than the following amounts:

1. Carbon monoxide - 575 $\mu g/m^3$, 8-hour average.
2. Nitrogen dioxide - 14 $\mu g/m^3$, annual average.
3. PM_{10} - 10 $\mu g/m^3$, 24-hour average.
4. Sulfur dioxide - 13 $\mu g/m^3$, 24-hour average.
5. Ozone.

Note: No de minimis air quality level is provided for ozone. However, any source with a net increase of 100 tons per year or more of volatile organic compounds subject to regulation under this chapter would be required to perform an ambient impact analysis, including the gathering of ambient air quality data.

6. Lead - 0.10 $\mu g/m^3$, 3-month average.
7. Mercury - 0.25 $\mu g/m^3$, 24-hour average.
8. Beryllium - 0.0010 $\mu g/m^3$, 24-hour average.
9. Fluorides - 0.25 $\mu g/m^3$, 24-hour average.
10. Vinyl chloride - 15 $\mu g/m^3$, 24-hour average.
11. Total reduced sulfur - 10 $\mu g/m^3$, 1-hour average.
12. Hydrogen sulfide - 0.20 $\mu g/m^3$, 1-hour average.
13. Reduced sulfur compounds - 10 $\mu g/m^3$, 1-hour average.

(b) The concentrations of the air contaminant in the area that the source or modification would affect are less than the concentrations listed in par. (a).

(c) The air contaminant is not listed in par. (a).

Note: The advance notice requirement for relocation of a portable source in the federal regulations (not less than 10 days advance notice) has been changed to not less than 30 days in sub. (4)(b).

NR 405.08 Control technology review. (1) A major stationary source or major modification shall meet each applicable emissions limitation under chs. NR 400 to 499 and under sections 111 and 112 of the act (42 USC 7411 and 7412).

(2) A new major stationary source shall apply best available control technology for each air contaminant that it would have the potential to emit in significant amounts.

(3) A major modification shall apply best available control technology for each air contaminant for which it would be a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the air contaminant would occur as a result of a physical change or change in the method of operation in the unit.

(4) For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source.

NR 405.09 Source impact analysis. The owner or operator of the proposed major source or major modification shall demonstrate that allowable emission increases from the proposed major source or major modification, in conjunction with all other applicable emissions increases or reduction, including secondary emissions, would not cause or contribute to air pollution in violation of either of the following:

(1) Any national ambient air quality standard in any air quality control region.

(2) Any applicable maximum allowable increase over the baseline concentration in any area.

NR 405.10 Air quality models. (1) All estimates of ambient concentrations required under this chapter shall be based on the applicable air quality models, data bases, and other requirements specified in the Guideline on Air Quality Models (Revised) in Appendix W of 40 CFR part 51, incorporated by reference in s. NR 484.04.

(2) Where an air quality impact model specified in the Guideline on Air Quality Models in Appendix W of 40 CFR part 51 is inappropriate, the model may be modified or another model substituted.

(3) A substitution or modification of a model shall be subject to the public comment procedures set forth in s. NR 405.15.

(4) Written approval of the administrator shall be obtained for any modification or substitution.

NR 405.11 Air quality analysis. (1) PREAPPLICATION ANALYSIS. (a) Any application for a permit under this chapter shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following air contaminants:

1. For the major source, each air contaminant that it would have the potential to emit in a significant amount.

2. For the major modification, each air contaminant for which it would result in a significant net emissions increase.

(b) For any air contaminant for which no national ambient air quality standard exists, the analysis shall contain such air quality monitoring data as the department determines is necessary to assess ambient air quality for that air contaminant in any area that the emissions of that air contaminant would affect.

(c) For any air contaminant for which a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that air contaminant would cause or contribute to a violation of the standard or any maximum allowable increase.

(d) In general, the continuous air monitoring data that is required shall be gathered over a period of one year and shall represent the year preceding receipt of the application, except that, if the department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than 4 months), the data that is required shall be gathered over at least that shorter period.

(e) The owner or operator of a proposed major stationary source or major modification of volatile organic compounds who satisfies all conditions of 40 CFR part 51, Appendix S, section IV, incorporated by reference in s. NR 484.04, may provide post-approval monitoring data for ozone in lieu of providing pre-construction data as required under this section.

(2) POST-CONSTRUCTION MONITORING The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the department determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

(3) OPERATION OF MONITORING STATIONS. The owner or operator of a major stationary source or a major modification shall meet the requirements of Appendix B to 40 CFR part 58, incorporated by reference in s. NR 484.04, during the operation of monitoring stations for purposes of satisfying this section.

NR 405.12 Source information. (1) The owner or operator of a proposed major source or major modification shall submit all information necessary to perform any analysis or make any determination required under procedures established in accordance with this chapter.

(2) Such information shall include:

(a) A description of the nature, location, design capacity, and typical operating schedule of the major source or major modification, including specifications and drawings showing its design and plant layout.

(b) A detailed schedule for construction of the major source or major modification.

(c) A detailed description as to what system of continuous emission reduction is planned by the major source or major modification, emission estimates, and any other information as necessary to determine that best available control technology as applicable would be applied.

(3) The owner or operator shall also provide information on all of the following:

(a) The air quality impact of the major source or major modification, including meteorological and topographical data necessary to estimate such impact.

(b) The air quality impacts and the nature and extent of any or all general, commercial, residential, industrial and other growth which has occurred since August 7, 1977, in the area the major source or major modification would affect.

NR 405.13 Additional impact analyses. (1) The owner or operator shall provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the major source or major modification and general commercial, residential, industrial and other growth associated with the major source or major modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general, commercial, residential, industrial and other growth associated with the major source or major modification.

NR 405.14 Sources impacting federal Class I areas - additional requirements. (1) NOTICE TO EPA. The department shall transmit to the administrator a copy of each permit application relating to a major stationary source or major modification and provide notice to the administrator of every action related to the consideration of such permit.

(2) FEDERAL LAND MANAGER. The federal land manager and the federal official charged with direct responsibility for management of Class I lands have an affirmative responsibility to protect the air quality related values (including visibility) of any such lands and to consider, in consultation with the administrator, whether a proposed source or modification would have an adverse impact on such values.

(3) DENIAL - IMPACT ON AIR QUALITY RELATED VALUES. The department shall allow the federal land manager of any Class I lands the opportunity to present to the department after the department’s preliminary determination required under procedures developed in accordance with s. NR 405.16. a demonstration that the emissions from the proposed major source or major modification would have an adverse impact on the air quality related values (including visibility) of any federal mandatory Class I lands. notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class l area. If the department concurs with such demonstration, the permit may not be issued.

(4) CLASS I VARIANCES. The owner or operator of a proposed major source or major modification may demonstrate to the federal land manager that the emissions from the source would have no adverse impact on the air quality-related values, including visibility, of these lands, notwithstanding that the change in air quality resulting from emissions from the source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the federal land manager concurs with this demonstration and so certifies to the department, the department may, provided that

applicable requirements of this chapter are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of particulate matter measured as PM_{10}, sulfur dioxide, and nitrogen dioxide would not exceed the following maximum allowable increases over minor source baseline concentration for these air contaminants.

Pollutant	Maximum Allowable Increase ($\mu g/m^3$)
PM_{10}	
Annual arithmetic mean	17
24-hour maximum	30
Sulfur Dioxide	
Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	325
Nitrogen Dioxide	
Annual arithmetic mean	25

(5) SULFUR DIOXIDE VARIANCE BY DEPARTMENT WITH FEDERAL LAND MANAGER'S CONCURRENCE. (a) The owner or operator of a proposed major source or major modification which cannot be approved under procedures developed pursuant to sub. (4) may demonstrate to the department that the source or modification cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for periods of 24-hours or less applicable to any Class I area and, in the case of federal mandatory Class I areas, that a variance under this subsection would not adversely affect the air quality related values of the area (including visibility).

(b) The department, after consideration of the federal land manager's recommendation (if any) and subject to his or her concurrence, may grant, after notice and an opportunity for a public hearing, a variance from such maximum allowable increase.

(c) If such variance is granted, the department shall issue a permit to such major source or major modification in accordance with provisions developed pursuant to sub. (7), provided that the applicable requirements of this chapter are otherwise met.

(6) VARIANCE BY THE DEPARTMENT WITH THE CONCURRENCE OF THE PRESIDENT OF THE UNITED STATES. (a) The recommendations of the department and the federal land manager shall be transferred to the President in any case where the department recommends a variance in which the federal land manager does not concur.

(b) The President may approve the department s recommendation if he or she finds that such variance is in the national interest.

(c) If such a variance is approved, the department shall issue a permit in accordance with provisions developed pursuant to the requirements of sub. (7), provided that the applicable requirements of this chapter are otherwise met.

(7) EMISSION LIMITATIONS FOR PRESIDENTIAL DENIAL OR DEPARTMENTAL VARIANCE. In the case of a permit issued under procedures developed pursuant to sub. (5) or (6), the major source or major modification shall comply with emission limitations as may be necessary to assure that emissions of sulfur dioxide from the major source or major modification would not, during any day on which the otherwise applicable maximum allowable increases are exceeded, cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increase for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period.

MAXIMUM ALLOWABLE SO_2 INCREASE
($\mu g/m^3$)

Period of exposure	Terrain areas	
	Low	High
24-hour maximum	36	62
3-hour maximum	130	221

NR 405.15 Public participation. (1) The department shall notify all applicants within 20 days as to the completeness of the application or any deficiency in the application or information submitted. In the event of such a deficiency, the date of receipt of the application shall be the date on which the department received all required information.

(2) Within 205 business days after receipt of a complete application, the department shall:

(a) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

(b) Make available in at least one location in each region in which the proposed source would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.

(c) Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and of the opportunity for comment at a public hearing, as well as written public comment.

(d) Send a copy of the notice of public comment to the applicant, the administrator and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: any other state or local air pollution control agencies; the chief executives of the city and county where the source would be located; any comprehensive regional land use planning agency; and any state, federal land manager, or Indian governing body whose lands may be affected by emissions from the major source or major modification.

(e) Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations.

(f) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing in making a final decision on the approvability of the application. The department shall make all comments available for public inspection in the same locations where the department made available pre-construction information relating to the proposed major source or major modification

(g) Make a final determination whether construction should be approved, approved with conditions, or disapproved.

(h) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the department made available pre-construction information and public comments relating to the source.

Note: The requirement that a final permit determination be accomplished within one year of receipt of a permit application in the federal regulations has been changed to within 205 business days of receipt of application in this subsection.

NR 405.16 Source obligation. (1) Approval to construct does not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the chs. NR 400 to 499 and any other requirements under local, state or federal law.

(2) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a

relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit an air contaminant such as a restriction on hours of operation, then the requirements of ss. NR 405.08 to 405.17 shall apply to the source or modification as though construction had not yet commenced on the major source or major modification.

(3) Each plan shall provide that the following specific provisions apply to projects at existing emissions units at a major stationary source (other than projects at a Clean Unit or at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase and the owner or operator elects to use the method specified in 405.02(25f)(ii)(a) through (c) for calculating projected actual emissions.

(i) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(a) A description of the project;

(b) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(c) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under 405.02(25f)(ii)(c) and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(ii) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph (3)(i) of this section to the reviewing authority. Nothing in this paragraph (3)(ii) shall be construed to require the owner or operator of such a unit to obtain any determination from the reviewing authority before beginning actual construction.

(iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph (3)(i)(b) of this section; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR pollutant at such emissions unit.

(iv) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the reviewing authority within 60 days after the end of each year during which records must be generated under paragraph (3)(iii) of this section setting out the unit's annual emissions during the calendar year that preceded submission of the report.

(v) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the reviewing authority if the annual emissions, in tons per year, from the project identified in paragraph (3)(i) of this section, exceed the baseline actual emissions (as documented and maintained pursuant to paragraph (3)(i)(c) of this section) by a significant amount (as defined in 405.02(27)) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (3)(i)(c) of this section. Such report shall be submitted to the reviewing authority within 60 days after the end of such year. The report shall contain the following:

(a) The name, address and telephone number of the major stationary source;

(b) The annual emissions as calculated pursuant to paragraph (3)(iii) of this section; and

(c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection). [51.166(r)(6)]

(4) Each plan shall provide that the owner or operator of the source shall make the information required to be documented and maintained pursuant to paragraph (3) of this section available for review upon request for inspection by the reviewing authority or the general public pursuant to the requirements contained in §70.4(b)(3)(viii) of this chapter. [51.166(r)(7)]

NR 405.17 Innovative control technology. (1) An owner or operator of a proposed major stationary source or major modification may request the department to approve a system of innovative control technology.

(2) The department may, with the consent of the governor of any other affected state, determine that the major source or major modification may employ a system of innovative control technology if all of the following conditions are met:

(a) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function.

(b) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under s. NR 405.08(2) no later than 3 years from the time of start-up or 6 years from the date of permit issuance.

(c) The source or modification would meet the requirements equivalent to those in s. NR 405.08 and 405.09 based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified in par. (b).

(d) The major source or major modification would not before the date specified do any of the following:

1. Cause or contribute to any violation of an applicable national ambient air quality standard.

2. Impact any Class 1 area.

3. Impact any area where an applicable increment is known to be violated.

(e) All other applicable requirements including those for public participation have been met.

(3) The department shall withdraw any approval to employ a system of innovative control technology made under this section, if any of the following occurs:

(a) The proposed system fails by the specified date in sub. (2)(b) to achieve the required continuous emissions reduction rate.

(b) The proposed system fails before the specified date in sub. (2)(b) so as to contribute to an unreasonable risk to public health, welfare, or safety.

(c) The department decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare or safety.

(4) If a major source or major modification fails to meet the required level of continuous emissions reduction within the specified time period, or if the approval is withdrawn in accordance with sub (3), the department may allow the source or modification up to an additional 3 years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

Note: The deadline for achieving the required continuous emissions reduction through innovative control technology in the federal regulations (not later than 4 years from the time of startup or 7 years from permit issuance) has been changed to no later than 3 years from time of startup or 6 years from the date of permit issuance in sub. (2)(b).

NR 405.18 Clean Unit Test for emissions units that are subject to BACT or LAER. The plan shall provide an owner or operator of a major stationary source the option of using the Clean Unit Test to determine whether emissions increases at a Clean Unit are part of a project that is a major modification according to the provisions in paragraphs (1) through (9) of this section.

(1)Applicability. The provisions of this section apply to any emissions unit for which the reviewing authority has issued a major NSR permit within the past 10 years. [51.166(t)(1)]

(2) General provisions for Clean Units. The provisions in paragraphs (i) through (iv) of this section apply to a Clean Unit.

(i) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (4) of this section) and before the expiration date (as determined in accordance with paragraph (5) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.

(ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT and the project would not alter any physical or operational characteristics that formed the basis for the BACT determination as specified in paragraph (6)(iv) of this section, the emissions unit remains a Clean Unit.

(iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that were adopted in conjunction with BACT or the project would alter any physical or operational characteristics that formed the basis for the BACT determination as specified in paragraph (6)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit re-qualifies as a Clean Unit pursuant to paragraph (3)(iii) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends immediately prior to the time when actual construction begins.

(iv) A project that causes an emissions unit to lose its designation as a Clean Unit is subject to the applicability requirements of paragraphs 51.166(a)(7)(iv)(a) through (d) and paragraph 51.166(a)(7)(iv)(f) as if the emissions unit is not a Clean Unit. [51.166(t)(2)]

(3) Qualifying or re-qualifying to use the Clean Unit Applicability Test. An emissions unit automatically qualifies as a Clean Unit when the unit meets the criteria in paragraphs (3)(i) and (ii) of this section. After the original Clean Unit designation expires in accordance with paragraph (5) of this section or is lost pursuant to paragraph (2)(iii) of this section, such emissions unit may re-qualify as a Clean Unit under either paragraph (3)(iii) of this section, or under the Clean Unit provisions in 405.19. To re-qualify as a Clean Unit under paragraph (3)(iii) of this section, the emissions unit must obtain a new major NSR permit issued through the applicable PSD program and meet all the criteria in paragraph (3)(iii) of this section. The Clean Unit designation applies individually for each pollutant emitted by the emissions unit.

(i) Permitting requirement. The emissions unit must have received a major NSR permit within the past 10 years. The owner or operator must maintain and be able to provide information that would demonstrate that this permitting requirement is met.

(ii) Qualifying air pollution control technologies. Air pollutant emissions from the emissions unit must be reduced through the use of air pollution control technology (which includes

pollution prevention as defined under paragraph (24s) of this section or work practices) that meets both the following requirements in paragraphs (3)(ii)(a) and (b) of this section.

(a) The control technology achieves the BACT or LAER level of emissions reductions as determined through issuance of a major NSR permit within the past 10 years. However, the emissions unit is not eligible for the Clean Unit designation if the BACT determination resulted in no requirement to reduce emissions below the level of a standard, uncontrolled, new emissions unit of the same type.

(b) The owner or operator made an investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or expenses to apply a pollution prevention technique to an emissions unit.

(iii) Re-qualifying for the Clean Unit designation. The emissions unit must obtain a new major NSR permit that requires compliance with the current-day BACT (or LAER), and the emissions unit must meet the requirements in paragraphs (3)(i) and (3)(ii) of this section. [51.166(t)(3)]

(4) Effective date of the Clean Unit designation. The effective date of an emissions unit's Clean Unit designation (that is, the date on which the owner or operator may begin to use the Clean Unit Test to determine whether a project at the emissions unit is a major modification) is determined according to the applicable paragraph (4)(i) or (4)(ii) of this section.

(i) Original Clean Unit designation, and emissions units that re-qualify as Clean Units by implementing a new control technology to meet current-day BACT. The effective date is the date the emissions unit's air pollution control technology is placed into service, or 3 years after the issuance date of the major NSR permit, whichever is earlier, but no sooner than the date that provisions for the Clean Unit applicability test are approved by the Administrator for incorporation into the plan and become effective for the State in which the unit is located.

(ii) Emissions Units that re-qualify for the Clean Unit designation using an existing control technology. The effective date is the date the new, major NSR permit is issued. [51.166(t)(4)]

(5) Clean Unit expiration. An emissions unit's Clean Unit designation expires (that is, the date on which the owner or operator may no longer use the Clean Unit Test to determine whether a project affecting the emissions unit is, or is part of, a major modification) according to the applicable paragraph (5)(i) or (ii) of this section.

(i) Original Clean Unit designation, and emissions units that re-qualify by implementing new control technology to meet current-day BACT. For any emissions unit that automatically qualifies as a Clean Unit under paragraphs (3)(i) and (ii) of this section or re-qualifies by implementing new control technology to meet current-day BACT under paragraph (3)(iii) of this section, the Clean Unit designation expires 10 years after the effective date, or the date the equipment went into service, whichever is earlier; or, it expires at any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (7) of this section.

(ii) Emissions units that re-qualify for the Clean Unit designation using an existing control technology. For any emissions unit that re-qualifies as a Clean Unit under paragraph (3)(iii) of this section using an existing control technology, the Clean Unit designation expires 10 years after the effective date; or, it expires any time the owner or operator fails to comply with the

provisions for maintaining the Clean Unit designation in paragraph (7) of this section. [51.166(t)(5)]

(6) Required title V permit content for a Clean Unit. After the effective date of the Clean Unit designation, and in accordance with the provisions of the applicable title V permit program under part 70 or part 71 of this chapter, but no later than when the title V permit is renewed, the title V permit for the major stationary source must include the following terms and conditions related to the Clean Unit in paragraphs (6)(i) through (vi) of this section.

(i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for which this Clean Unit designation applies.

(ii) The effective date of the Clean Unit designation. If this date is not known when the Clean Unit designation is initially recorded in the title V permit (e.g., because the air pollution control technology is not yet in service), the permit must describe the event that will determine the effective date (e.g., the date the control technology is placed into service). Once the effective date is determined, the owner or operator must notify the reviewing authority of the exact date. This specific effective date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iii) The expiration date of the Clean Unit designation. If this date is not known when the Clean Unit designation is initially recorded into the title V permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the expiration date (e.g., the date the control technology is placed into service). Once the expiration date is determined, the owner or operator must notify the reviewing authority of the exact date. The expiration date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iv) All emission limitations and work practice requirements adopted in conjunction with BACT, and any physical or operational characteristics that formed the basis for the BACT determination (e.g., possibly the emissions unit's capacity or throughput).

(v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining the Clean Unit designation. (See paragraph (7) of this section.)

(vi) Terms reflecting the owner or operator's duties to maintain the Clean Unit designation and the consequences of failing to do so, as presented in paragraph (7) of this section. [51.166(t)(6)]

(7) Maintaining the Clean Unit designation. To maintain the Clean Unit designation, the owner or operator must conform to all the restrictions listed in paragraphs (7)(i) through (iii) of this section. This paragraph (7) applies independently to each pollutant for which the emissions unit has the Clean Unit designation. That is, failing to conform to the restrictions for one pollutant affects the Clean Unit designation only for that pollutant.

(i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted in conjunction with the BACT that is recorded in the major NSR permit, and subsequently reflected in the title V permit. The owner or operator may not make a physical change in or change in the method of operation of the Clean Unit that causes the emissions unit to function in a manner

that is inconsistent with the physical or operational characteristics that formed the basis for the BACT determination (e.g., possibly the emissions unit's capacity or throughput).

(ii) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.

(iii) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends. [51.166(t)(7)]

(8) Netting at Clean Units. Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis"), unless such use occurs before the effective date of the Clean Unit designation, or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit, then the owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the new emission limitation if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter. [51.166(t)(8)]

(9) Effect of redesignation on the Clean Unit designation. The Clean Unit designation of an emissions unit is not affected by redesignation of the attainment status of the area in which it is located. That is, if a Clean Unit is located in an attainment area and the area is redesignated to nonattainment, its Clean Unit designation is not affected. Similarly, redesignation from nonattainment to attainment does not affect the Clean Unit designation. However, if an existing Clean Unit designation expires, it must re-qualify under the requirements that are currently applicable in the area. [51.166(t)(9)]

NR 405.19 Clean Unit provisions for emissions units that achieve an emission limitation comparable to BACT.

The plan shall provide an owner or operator of a major stationary source the option of using the Clean Unit Test to determine whether emissions increases at a Clean Unit are part of a project that is a major modification according to the provisions in paragraphs (1) through (11) of this section. [51.166(u)]

(1) Applicability. The provisions of this paragraph apply to emissions units which do not qualify as Clean Units under 405.18 of this section, but which are achieving a level of emissions control comparable to BACT, as determined by the reviewing authority in accordance with this paragraph. [51.166(u)(1)]

(2) General provisions for Clean Units. The provisions in paragraphs (2)(i) through (iv) of this section apply to a Clean Unit.

(i) Any project for which the owner or operator begins actual construction after the effective date of the Clean Unit designation (as determined in accordance with paragraph (5) of this section) and before the expiration date (as determined in accordance with paragraph (6) of this section) will be considered to have occurred while the emissions unit was a Clean Unit.

(ii) If a project at a Clean Unit does not cause the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (4) of this section) to be comparable to BACT, and the project would not alter any physical or operational characteristics

that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT as specified in paragraph (8)(iv) of this section, the emissions unit remains a Clean Unit.

(iii) If a project causes the need for a change in the emission limitations or work practice requirements in the permit for the unit that have been determined (pursuant to paragraph (4) of this section) to be comparable to BACT, or the project would alter any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT as specified in paragraph (8)(iv) of this section, then the emissions unit loses its designation as a Clean Unit upon issuance of the necessary permit revisions (unless the unit re-qualifies as a Clean Unit pursuant to paragraph (3)(iv) of this section). If the owner or operator begins actual construction on the project without first applying to revise the emissions unit's permit, the Clean Unit designation ends immediately prior to the time when actual construction begins.

(iv) A project that causes an emissions unit to lose its designation as a Clean Unit is subject to the applicability requirements of paragraphs 51.166(a)(7)(iv)(a) through (d) and paragraph 51.166(a)(7)(iv)(f) as if the emissions unit is not a Clean Unit. [51.166(u)(2)]

(3) Qualifying or re-qualifying to use the Clean Unit applicability test. An emissions unit qualifies as a Clean Unit when the unit meets the criteria in paragraphs (3)(i) through (iii) of this section. After the original Clean Unit designation expires in accordance with paragraph (6) of this section or is lost pursuant to paragraph (2)(iii) of this section, such emissions unit may re-qualify as a Clean Unit under either paragraph (3)(iv) of this section, or under the Clean Unit provisions in paragraph 405.18. To re-qualify as a Clean Unit under paragraph (3)(iv) of this section, the emissions unit must obtain a new permit issued pursuant to the requirements in paragraphs (7) and (8) of this section and meet all the criteria in paragraph (3)(iv) of this section. The reviewing authority will make a separate Clean Unit designation for each pollutant emitted by the emissions unit for which the emissions unit qualifies as a Clean Unit.

(i) Qualifying air pollution control technologies. Air pollutant emissions from the emissions unit must be reduced through the use of air pollution control technology (which includes pollution prevention as defined under paragraph (24s) or work practices) that meets both the following requirements in paragraphs (3)(i)(a) and (b) of this section.

(a) The owner or operator has demonstrated that the emissions unit's control technology is comparable to BACT according to the requirements of paragraph (4) of this section. However, the emissions unit is not eligible for the Clean Unit designation if its emissions are not reduced below the level of a standard, uncontrolled emissions unit of the same type (e.g., if the BACT determinations to which it is compared have resulted in a determination that no control measures are required).

(b) The owner or operator made an investment to install the control technology. For the purpose of this determination, an investment includes expenses to research the application of a pollution prevention technique to the emissions unit or to retool the unit to apply a pollution prevention technique.

(ii) Impact of emissions from the unit. The reviewing authority must determine that the allowable emissions from the emissions unit will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) that has

been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.

(iii) Date of installation. An emissions unit may qualify as a Clean Unit even if the control technology, on which the Clean Unit designation is based, was installed before the effective date of plan requirements to implement the requirements of this paragraph (3)(iii). However, for such emissions units, the owner or operator must apply for the Clean Unit designation within 2 years after the plan requirements become effective. For technologies installed after the plan requirements become effective, the owner or operator must apply for the Clean Unit designation at the time the control technology is installed.

(iv) Re-qualifying as a Clean Unit. The emissions unit must obtain a new permit (pursuant to requirements in paragraphs (7) and (8) of this section) that demonstrates that the emissions unit's control technology is achieving a level of emission control comparable to current-day BACT, and the emissions unit must meet the requirements in paragraphs (3)(i)(a) and (3)(ii) of this section. [51.166(u)(3)]

(4) Demonstrating control effectiveness comparable to BACT. The owner or operator may demonstrate that the emissions unit's control technology is comparable to BACT for purposes of paragraph (3)(i) of this section according to either paragraph (4)(i) or (ii) of this section. Paragraph (4)(iii) of this section specifies the time for making this comparison.

(i) Comparison to previous BACT and LAER determinations. The Administrator maintains an on-line data base of previous determinations of RACT, BACT, and LAER in the RACT/BACT/LAER Clearinghouse (RBLC). The emissions unit's control technology is presumed to be comparable to BACT if it achieves an emission limitation that is equal to or better than the average of the emission limitations achieved by all the sources for which a BACT or LAER determination has been made within the preceding 5 years and entered into the RBLC, and for which it is technically feasible to apply the BACT or LAER control technology to the emissions unit. The reviewing authority shall also compare this presumption to any additional BACT or LAER determinations of which it is aware, and shall consider any information on achieved-in-practice pollution control technologies provided during the public comment period, to determine whether any presumptive determination that the control technology is comparable to BACT is correct.

(ii) The substantially-as-effective test. The owner or operator may demonstrate that the emissions unit's control technology is substantially as effective as BACT. In addition, any other person may present evidence related to whether the control technology is substantially as effective as BACT during the public participation process required under paragraph (7) of this section. The reviewing authority shall consider such evidence on a case-by-case basis and determine whether the emissions unit's air pollution control technology is substantially as effective as BACT.

(iii) Time of comparison –

(a) Emissions units with control technologies that are installed before the effective date of plan requirements implementing this paragraph. The owner or operator of an emissions unit whose control technology is installed before the effective date of plan requirements implementing this paragraph may, at its option, either demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to the BACT requirements that applied at the time the control technology was installed, or demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to current-

day BACT requirements. The expiration date of the Clean Unit designation will depend on which option the owner or operator uses, as specified in paragraph (6) of this section.

(b) Emissions units with control technologies that are installed after the effective date of plan requirements implementing this paragraph. The owner or operator must demonstrate that the emission limitation achieved by the emissions unit's control technology is comparable to current-day BACT requirements. [51.166(u)(4)]

(5) Effective date of the Clean Unit designation. The effective date of an emissions unit's Clean Unit designation (that is, the date on which the owner or operator may begin to use the Clean Unit Test to determine whether a project involving the emissions unit is a major modification) is the date that the permit required by paragraph (7) of this section is issued or the date that the emissions unit's air pollution control technology is placed into service, whichever is later. [51.166(u)(5)]

(6) Clean Unit expiration. If the owner or operator demonstrates that the emission limitation achieved by the emissions unit's control technology is comparable to the BACT requirements that applied at the time the control technology was installed, then the Clean Unit designation expires 10 years from the date that the control technology was installed. For all other emissions units, the Clean Unit designation expires 10 years from the effective date of the Clean Unit designation, as determined according to paragraph (5) of this section. In addition, for all emissions units, the Clean Unit designation expires any time the owner or operator fails to comply with the provisions for maintaining the Clean Unit designation in paragraph (9) of this section. [51.166(u)(6)]

(7) Procedures for designating emissions units as Clean Units. The reviewing authority shall designate an emissions unit a Clean Unit only by issuing a permit through a permitting program that has been approved by the Administrator and that conforms with the requirements of §§51.160 through 51.164 of this chapter, including requirements for public notice of the proposed Clean Unit designation and opportunity for public comment. Such permit must also meet the requirements in paragraph (8) of this section. [51.166(u)(7)]

(8) Required permit content. The permit required by paragraph (7) of this section shall include the terms and conditions set forth in paragraphs (8)(i) through (vi). Such terms and conditions shall be incorporated into the major stationary source's title V permit in accordance with the provisions of the applicable title V permit program under part 70 or part 71 of this chapter, but no later than when the title V permit is renewed.

(i) A statement indicating that the emissions unit qualifies as a Clean Unit and identifying the pollutant(s) for which the Clean Unit designation applies.

(ii) The effective date of the Clean Unit designation. If this date is not known when the reviewing authority issues the permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the effective date (e.g., the date the control technology is placed into service). Once the effective date is known, then the owner or operator must notify the reviewing authority of the exact date. This specific effective date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iii) The expiration date of the Clean Unit designation. If this date is not known when the reviewing authority issues the

permit (e.g., because the air pollution control technology is not yet in service), then the permit must describe the event that will determine the expiration date (e.g., the date the control technology is placed into service). Once the expiration date is known, then the owner or operator must notify the reviewing authority of the exact date. The expiration date must be added to the source's title V permit at the first opportunity, such as a modification, revision, reopening, or renewal of the title V permit for any reason, whichever comes first, but in no case later than the next renewal.

(iv) All emission limitations and work practice requirements adopted in conjunction with emission limitations necessary to assure that the control technology continues to achieve an emission limitation comparable to BACT, and any physical or operational characteristics that formed the basis for determining that the emissions unit's control technology achieves a level of emissions control comparable to BACT (e.g., possibly the emissions unit's capacity or throughput).

(v) Monitoring, recordkeeping, and reporting requirements as necessary to demonstrate that the emissions unit continues to meet the criteria for maintaining its Clean Unit designation. (See paragraph (9) of this section.)

(vi) Terms reflecting the owner or operator's duties to maintain the Clean Unit designation and the consequences of failing to do so, as presented in paragraph (9) of this section. [51.166(u)(8)]

(9) Maintaining the Clean Unit designation. To maintain the Clean Unit designation, the owner or operator must conform to all the restrictions listed in paragraphs (9)(i) through (v) of this section. This paragraph (9) applies independently to each pollutant for which the reviewing authority has designated the emissions unit a Clean Unit. That is, failing to conform to the restrictions for one pollutant affects the Clean Unit designation only for that pollutant.

(i) The Clean Unit must comply with the emission limitation(s) and/or work practice requirements adopted to ensure that the control technology continues to achieve emission control comparable to BACT.

(ii) The owner or operator may not make a physical change in or change in the method of operation of the Clean Unit that causes the emissions unit to function in a manner that is inconsistent with the physical or operational characteristics that formed the basis for the determination that the control technology is achieving a level of emission control that is comparable to BACT (e.g., possibly the emissions unit's capacity or throughput).

(iii) [Reserved]

(iv) The Clean Unit must comply with any terms and conditions in the title V permit related to the unit's Clean Unit designation.

(v) The Clean Unit must continue to control emissions using the specific air pollution control technology that was the basis for its Clean Unit designation. If the emissions unit or control technology is replaced, then the Clean Unit designation ends. [51.166(u)(9)]

(10) Netting at Clean Units. Emissions changes that occur at a Clean Unit must not be included in calculating a significant net emissions increase (that is, must not be used in a "netting analysis") unless such use occurs before the effective date of plan requirements adopted to implement this section or after the Clean Unit designation expires; or, unless the emissions unit reduces emissions below the level that qualified the unit as a Clean Unit. However, if the Clean Unit reduces emissions below the level that qualified the unit as a Clean Unit, then the owner or operator may generate a credit for the difference between the level that qualified the unit as a Clean Unit and the emissions unit's new emission limitation if such reductions are surplus, quantifiable, and permanent.

For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter. [51.166(u)(10)]

(11) Effect of redesignation on the Clean Unit designation. The Clean Unit designation of an emissions unit is not affected by redesignation of the attainment designation of the area in which it is located. That is, if a Clean Unit is located in an attainment area and the area is redesignated to nonattainment, its Clean Unit designation is not affected. Similarly, redesignation from nonattainment to attainment does not affect the Clean Unit designation. However, if a Clean Unit's designation expires or is lost pursuant to paragraphs 405.18(2)(iii) and (2)(iii) of this section, it must re-qualify under the requirements that are currently applicable. [51.166(u)(11)]

NR 405.20 PCP exclusion procedural requirements. Each plan shall include provisions for PCPs equivalent to those contained in paragraphs (1) through (6) of this section. [51.166(v)]

(1) Before an owner or operator begins actual construction of a PCP, the owner or operator must either submit a notice to the reviewing authority if the project is listed in 405.02 (24m)(i) through (vi), or if the project is not listed in 405.02 (24m)(i) through (vi), then the owner or operator must submit a permit application and obtain approval to use the PCP exclusion from the reviewing authority consistent with the requirements in paragraph (5) of this section. Regardless of whether the owner or operator submits a notice or a permit application, the project must meet the requirements in paragraph (2) of this section, and the notice or permit application must contain the information required in paragraph (3) of this section. [51.166(v)(1)]

(2) Any project that relies on the PCP exclusion must meet the requirements in paragraphs (2)(i) and (ii) of this section.

(i) Environmentally beneficial analysis. The environmental benefit from the emission reductions of pollutants regulated under the Act must outweigh the environmental detriment of emissions increases in pollutants regulated under the Act. A statement that a technology from 405.02(24m)(i) through (vi) is being used shall be presumed to satisfy this requirement.

(ii) Air quality analysis. The emissions increases from the project will not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public. [51.166(v)(2)]

(3) Content of notice or permit application. In the notice or permit application sent to the reviewing authority, the owner or operator must include, at a minimum, the information listed in paragraphs (3)(i) through (v) of this section.

(i) A description of the project.

(ii) The potential emissions increases and decreases of any pollutant regulated under the Act and the projected emissions increases and decreases using the methodology in paragraph 51.166(a)(7)(vi), that will result from the project, and a copy of the environmentally beneficial analysis required by paragraph (2)(i) of this section.

(iii) A description of monitoring and recordkeeping, and all other methods, to be used on an ongoing basis to demonstrate that the project is environmentally beneficial. Methods should be sufficient to meet the requirements in part 70 and part 71.

(iv) A certification that the project will be designed and operated in a manner that is consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (2)(i) and (ii) of this section, with information submitted in the notice or permit application, and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.

(v) Demonstration that the PCP will not have an adverse air quality impact (e.g., modeling, screening level modeling results, or a statement that the collateral emissions increase is included within the parameters used in the most recent modeling exercise) as required by paragraph (2)(ii) of this section. An air quality impact analysis is not required for any pollutant that will not experience a significant emissions increase as a result of the project. [51.166(v)(3)]

(4) Notice process for listed projects. For projects listed in 405.02(24m)(i) through (vi), the owner or operator may begin actual construction of the project immediately after notice is sent to the reviewing authority (unless otherwise prohibited under requirements of the applicable plan). The owner or operator shall respond to any requests by its reviewing authority for additional information that the reviewing authority determines is necessary to evaluate the suitability of the project for the PCP exclusion. [51.166(v)(4)]

(5) Permit process for unlisted projects. Before an owner or operator may begin actual construction of a PCP project that is not listed in 405.02 (24m)(i) through (vi), the project must be approved by the reviewing authority and recorded in a plan-approved permit or title V permit using procedures that are consistent with §§51.160 and 51.161. This includes the requirement that the reviewing authority provide the public with notice of the proposed approval, with access to the environmentally beneficial analysis and the air quality analysis, and provide at least a 30-day period for the public and the Administrator to submit comments. The reviewing authority must address all material comments received by the end of the comment period before taking final action on the permit. [51.166(v)(5)]

(6) Operational requirements. Upon installation of the PCP, the owner or operator must comply with the requirements of paragraphs (6)(i) through (iv) of this section.

(i) General duty. The owner or operator must operate the PCP consistent with proper industry and engineering practices, in a manner that is consistent with the environmentally beneficial analysis and air quality analysis required by paragraphs (2)(i) and (ii) of this section, with information submitted in the notice or permit application required by paragraph (3), and in such a way as to minimize, within the physical configuration and operational standards usually associated with the emissions control device or strategy, emissions of collateral pollutants.

(ii) Recordkeeping. The owner or operator must maintain copies on site of the environmentally beneficial analysis, the air quality impacts analysis, and monitoring and other emission records to prove that the PCP operated consistent with the general duty requirements in paragraph (6)(i) of this section.

(iii) Permit requirements. The owner or operator must comply with any provisions in the plan-approved permit or title V permit related to use and approval of the PCP exclusion.

(iv) Generation of Emission Reduction Credits. Emission reductions created by a PCP shall not be included in calculating a significant net emissions increase unless the emissions unit further

reduces emissions after qualifying for the PCP exclusion (e.g., taking an operational restriction on the hours of operation.) The owner or operator may generate a credit for the difference between the level of reduction which was used to qualify for the PCP exclusion and the new emission limitation if such reductions are surplus, quantifiable, and permanent. For purposes of generating offsets, the reductions must also be federally enforceable. For purposes of determining creditable net emissions increases and decreases, the reductions must also be enforceable as a practical matter. [51.166(v)(6)]

NR 405.21 Actuals PALs. The plan shall provide for PALs according to the provisions in paragraphs (1) through (15) of this section. [51.166(w)]

(1) Applicability.

(i) The reviewing authority may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in paragraphs (1) through (15) of this section. The term "PAL" shall mean "actuals PAL" throughout of this section.

(ii) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in paragraphs (1) through (15) of this section, and complies with the PAL permit:

(a) Is not a major modification for the PAL pollutant;

(b) Does not have to be approved through the plan's major NSR program; and

(c) Is not subject to the provisions in paragraph 405.16(2) of this section (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program).

(iii) Except as provided under paragraph (1)(ii)(c) of this section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL. [51.166(w)(1)]

(2) Definitions. The plan shall use the definitions in paragraphs (2)(i) through (xi) of this section for the purpose of developing and implementing regulations that authorize the use of actuals PALs consistent with paragraphs (1) through (15) of this section. When a term is not defined in these paragraphs, it shall have the meaning given in paragraph 405.02 of this section.

(i) Actuals PAL for a major stationary source means a PAL based on the baseline actual emissions (as defined in paragraph (2m) of this section) of all emissions units (as defined in paragraph (12) of this section) at the source, that emit or have the potential to emit the PAL pollutant.

(ii) Allowable emissions means "allowable emissions" as defined in paragraph (2) of this section, except as this definition is modified according to paragraphs (2)(ii)(a) and (b) of this section.

(a) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

(b) An emissions unit's potential to emit shall be determined using the definition in paragraph (25) of this section, except that the words "or enforceable as a practical matter" should be added after "federally enforceable."

(iii) Small emissions unit means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in paragraph (27) of this section or in the Act, whichever is lower.

(iv) Major emissions unit means:

(a) Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or

(b) Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Act for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

(v) Plantwide applicability limitation (PAL) means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with paragraphs (1) through (15) of this section.

(vi) PAL effective date generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(vii) PAL effective period means the period beginning with the PAL effective date and ending 10 years later.

(viii) PAL major modification means, notwithstanding paragraphs 405.02(21) and 405.02(24) of this section (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

(ix) PAL permit means the major NSR permit, the minor NSR permit, or the State operating permit under a program that is approved into the plan, or the title V permit issued by the reviewing authority that establishes a PAL for a major stationary source.

(x) PAL pollutant means the pollutant for which a PAL is established at a major stationary source.

(xi) Significant emissions unit means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in paragraph 405.02(27) of this section or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in paragraph (2)(iv) of this section. [51.166(w)(2)]

(3) Permit application requirements. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information in paragraphs (3)(i) through (iii) of this section to the reviewing authority for approval.

(i) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, Federal or State applicable requirements, emission limitations, or work practices apply to each unit.

(ii) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.

(iii) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by paragraph (13)(i)

of this section. [51.166(w)(3)]

(4) General requirements for establishing PALs.

(i) The plan allows the reviewing authority to establish a PAL at a major stationary source, provided that at a minimum, the requirements in paragraphs (4)(i)(a) through (g) of this section are met.

(a) The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

(b) The PAL shall be established in a PAL permit that meets the public participation requirements in paragraph (5) of this section.

(c) The PAL permit shall contain all the requirements of paragraph (7) of this section.

(d) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

(e) Each PAL shall regulate emissions of only one pollutant.

(f) Each PAL shall have a PAL effective period of 10 years.

(g) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in paragraphs (12) through (14) of this section for each emissions unit under the PAL through the PAL effective period.

(ii) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under §51.165(a)(3)(ii) of this chapter unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL. [51.166(w)(4)]

(5) Public participation requirements for PALs. PALs for existing major stationary sources shall be established, renewed, or increased, through a procedure that is consistent with §§51.160 and 51.161 of this chapter. This includes the requirement that the reviewing authority provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The reviewing authority must address all material comments before taking final action on the permit. [51.166(w)(5)]

(6) Setting the 10-year actuals PAL level. The plan shall provide that the actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in paragraph 405.02(2m)) of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant under 405.02(27) or under the Act, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive 24-month period must be used to determine the baseline actual

emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shutdown after this 24-month period must be subtracted from the PAL level. Emissions from units on which actual construction began after the 24-month period must be added to the PAL level in an amount equal to the potential to emit of the units. The reviewing authority shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the reviewing authority is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NOX to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s). [51.166(w)(6)]

(7) Contents of the PAL permit. The plan shall require that the PAL permit contain, at a minimum, the information in paragraphs (7)(i) through (x) of this section.

(i) The PAL pollutant and the applicable source-wide emission limitation in tons per year.

(ii) The PAL permit effective date and the expiration date of the PAL (PAL effective period).

(iii) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with paragraph (10) of this section before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the reviewing authority.

(iv) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.

(v) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of paragraph (9) of this section.

(vi) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by paragraph (3)(i) of this section.

(vii) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under paragraph (13) of this section.

(viii) A requirement to retain the records required under paragraph (13) of this section on site. Such records may be retained in an electronic format.

(ix) A requirement to submit the reports required under paragraph (14) of this section by the required deadlines.

(x) Any other requirements that the reviewing authority deems necessary to implement and enforce the PAL. [51.166(w)(7)]

(8) PAL effective period and reopening of the PAL permit. The plan shall require the information in paragraphs (8)(i) and (ii) of this section.

(i) PAL effective period. The reviewing authority shall specify a PAL effective period of 10 years.

(ii) Reopening of the PAL permit.

(a) During the PAL effective period, the plan shall require the reviewing authority to reopen the PAL permit to:

(1) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

(2) Reduce the PAL if the owner or operator of the

major stationary source creates creditable emissions reductions for use as offsets under §51.165(a)(3)(ii) of this chapter; and

(3) Revise the PAL to reflect an increase in the PAL as provided under paragraph (11) of this section.

(b) The plan shall provide the reviewing authority discretion to reopen the PAL permit for the following:

(1) Reduce the PAL to reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date;

(2) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the State may impose on the major stationary source under the plan; and

(3) Reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an AQRV that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.

(c) Except for the permit reopening in paragraph (8)(ii)(a)(1) of this section for the correction of typographical/calculation errors that do not increase the PAL level, all reopenings shall be carried out in accordance with the public participation requirements of paragraph (5) of this section. [51.166(w)(8)]

(9) Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in paragraph (10) of this section shall expire at the end of the PAL effective period, and the requirements in paragraphs (9)(i) through (v) of this section shall apply.

(i) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in paragraphs (9)(i)(a) and (b) of this section.

(a) Within the time frame specified for PAL renewals in paragraph (10)(ii) of this section, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the reviewing authority) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under paragraph (10)(v) of this section, such distribution shall be made as if the PAL had been adjusted.

(b) The reviewing authority shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the reviewing authority determines is appropriate.

(ii) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The reviewing authority may approve the use of monitoring systems (source testing,emission factors, etc.) other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with the allowable emission limitation.

(iii) Until the reviewing authority issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph (9)(i)(b) of this section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL

emission limitation.

(iv) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in 405.02(21).

(v) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to paragraph 405.16(2) of this section, but were eliminated by the PAL in accordance with the provisions in paragraph (1)(ii)(c) of this section. [51.166(w)(9)]

(10) Renewal of a PAL. (i) The reviewing authority shall follow the procedures specified in paragraph (5) of this section in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the reviewing authority.

(ii) Application deadline. The plan shall require that a major stationary source owner or operator shall submit a timely application to the reviewing authority to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(iii) Application requirements. The application to renew a PAL permit shall contain the information required in paragraphs (10)(iii) (a) through (d) of this section.

(a) The information required in paragraphs (3)(i) through (iii) of this section.

(b) A proposed PAL level.

(c) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

(d) Any other information the owner or operator wishes the reviewing authority to consider in determining the appropriate level for renewing the PAL.

(iv) PAL adjustment. In determining whether and how to adjust the PAL, the reviewing authority shall consider the options outlined in paragraphs (10)(iv) (a) and (b) of this section. However, in no case may any such adjustment fail to comply with paragraph (10)(iv)(c) of this section.

(a) If the emissions level calculated in accordance with paragraph (6) of this section is equal to or greater than 80 percent of the PAL level, the reviewing authority may renew the PAL at the same level without considering the factors set forth in paragraph (10)(iv)(b) of this section; or

(b) The reviewing authority may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the reviewing authority in its written rationale.

(c) Notwithstanding paragraphs (10)(iv) (a) and (b) of this section:

(1) If the potential to emit of the major stationary source is less than the PAL, the reviewing authority shall adjust the PAL to a level no greater than the potential to emit of the source; and

(2) The reviewing authority shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (11) of this section (increasing a PAL).

(v) If the compliance date for a State or Federal requirement that applies to the PAL source occurs during the PAL effective period, and if the reviewing authority has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or title V permit renewal, whichever occurs first. [51.166(w)(10)]

(11) Increasing a PAL during the PAL effective period.

(i) The plan shall require that the reviewing authority may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (11)(i) (a) through (d) of this section.

(a) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

(b) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s), exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

(c) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in paragraph (11)(i)(a) of this section, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.

(d) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(ii) The reviewing authority shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with paragraph (w)(11)(i)(b) of this section), plus the sum of the baseline actual emissions of the small emissions units.

(iii) The PAL permit shall be revised to reflect the increased

PAL level pursuant to the public notice requirements of paragraph (w)(5) of this section. [51.166(w)(11)]

(12) Monitoring requirements for PALs

(i) General requirements.

(a) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

(b) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (12)(ii) (a) through (d) of this section and must be approved by the reviewing authority.

(c) Notwithstanding paragraph (12)(i)(b) of this section, you may also employ an alternative monitoring approach that meets paragraph (12)(i)(a) of this section if approved by the reviewing authority.

(d) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.

(ii) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (12)(iii) through (ix) of this section:

(a) Mass balance calculations for activities using coatings or solvents;

(b) CEMS;

(c) CPMS or PEMS; and

(d) Emission factors.

(iii) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

(a) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

(b) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

(c) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the reviewing authority determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(iv) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(a) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and

(b) CEMS must sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.

(v) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

(a) The CPMS or the PEMS must be based on current site-

specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and

(b) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the reviewing authority, while the emissions unit is operating.

(vi) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(a) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

(b) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

(c) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the reviewing authority determines that testing is not required.

(vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

(viii) Notwithstanding the requirements in paragraphs (12)(iii) through (vii) of this section, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the reviewing authority shall, at the time of permit issuance:

(a) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

(b) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

(ix) Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the reviewing authority. Such testing must occur at least once every 5 years after issuance of the PAL. [51.166(w)(12)]

(13) Recordkeeping requirements.

(i) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of this section and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.

(ii) The PAL permit shall require an owner or operator to retain a copy of the following records, for the duration of the PAL effective period plus 5 years:

(a) A copy of the PAL permit application and any applications for revisions to the PAL; and

(b) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance. [51.166(w)(13)]

(14) Reporting and notification requirements. The owner or operator shall

submit semi-annual monitoring reports and prompt deviation reports to the reviewing authority in accordance with the applicable title V operating permit program. The reports shall meet the requirements in paragraphs (14)(i) through (iii) of this section.

(i) Semi-annual report. The semi-annual report shall be submitted to the reviewing authority within 30 days of the end of each reporting period. This report shall contain the information required in paragraphs (14)(i)(a) through (g) of this section.

(a) The identification of owner and operator and the permit number.

(b) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (13)(i) of this section.

(c) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

(d) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.

(e) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

(f) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by paragraph (12)(vii) of this section.

(g) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(ii) Deviation report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to §70.6(a)(3)(iii)(B) of this chapter shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing §70.6(a)(3)(iii)(B) of this chapter. The reports shall contain the following information:

(a) The identification of owner and operator and the permit number;

(b) The PAL requirement that experienced the deviation or that was exceeded;

(c) Emissions resulting from the deviation or the exceedance; and

(d) A signed statement by the responsible official (as defined by the applicable title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

(iii) Re-validation results. The owner or operator shall submit to the reviewing authority the results of any re-validation test or method within three months after completion of such test or method. [51.166(w)(14)]

(15) Transition requirements.

(i) No reviewing authority may issue a PAL that does not comply with the requirements in paragraphs (1) through

(15) of this section after the Administrator has approved regulations incorporating these requirements into a plan.

(ii) The reviewing authority may supersede any PAL which was established prior to the date of approval of the plan by the Administrator with a PAL that complies with the requirements of paragraphs (1) through (15) of this section. [51.166(w)(15)]

NR 405.22 If any provision of this section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby. [51.166(x)]